

TYPE SPECIMENS OF RECENT AND FOSSIL MOLLUSCA DESCRIBED BY H. J. FINLAY

PART 1. (Scissurellidae — Turbinidae)

W. O. CERNOHORSKY
AUCKLAND INSTITUTE AND MUSEUM

Abstract. H. J. Finlay's type specimens of Recent and fossil mollusca deposited in the Auckland Institute and Museum are enumerated. Dimensions, illustrations, relevant synonymy and bibliography are appended.

Harold John Finlay was born in 1901 in Comilla, India, and came to New Zealand in his early childhood. Despite a severe handicap, being confined to a wheelchair practically all his life, he was an outstanding scholar who gained a MSc. in chemistry in 1921 and a DSc. degree from Otago University. He was Edmond fellow in chemistry from 1921 to 1923, National research scholar in Palaeontology from 1923 to 1926, biologist for the Fisheries Department from 1927 to 1929 and palaeontologist for Vacuum Oil Co. from 1933 to 1934. From 1937 till the time of his death in 1951, he was micropalaeontologist with the New Zealand Geological Survey. In 1939 he was elected a fellow of the Royal Society of New Zealand.

The type specimens of most species described by Finlay remained in his private collection which was acquired, through purchase, by the Auckland Institute and Museum in 1937. His collection of Recent and fossil molluscs comprised 14,000 species lots and 437 primary types. The majority of the types are either fossils, or beach-worn specimens of Recent species and generally not in the best condition. The types held by the Auckland Institute and Museum will be listed systematically, in parts, from Gastropoda to Bivalvia, and pertinent information as to registration number, number of paratypes and dimensions of holotypes will be recorded. Every attempt will be made to illustrate types not previously figured by Finlay, and unsatisfactory illustrations will be repeated, provided the types are in a reasonable condition. A complete bibliography is given in part 1, consisting of only those papers in which new species and genera of Mollusca were described by Finlay.

The date of description appearing in one of Finlay's papers (1927a) has been bracketed, pending a decision by the International Commission on Zoological Nomenclature on the acceptance of 23rd December 1926 or 10th March 1927 as the publication date.

Family SCISSIONELLIDAE

Schismope Jeffreys, 1856**Schismope lyallensis** Finlay, [1927]

(Fig. 1)

1927. *Schismope lyallensis* Finlay, Trans. Proc. N.Z. Inst. 57: 340; Powell, 1937, Shellf. N.Z. p. 62; Fleming, 1966, N.Z. Dep. Sci. Ind. Res. Bull. 173: 36.

TYPE LOCALITY: Lyall Bay [Wellington].

Type material: ARM No. TM-696. Holotype: height 1.8 mm, width 2.2 mm (beach-worn). One paratype, width 1.5 mm (translucent juvenile specimen).

The only features not mentioned by Finlay are the short, spaced and minute sutural ribs which are visible under magnification on the body whorl suture.

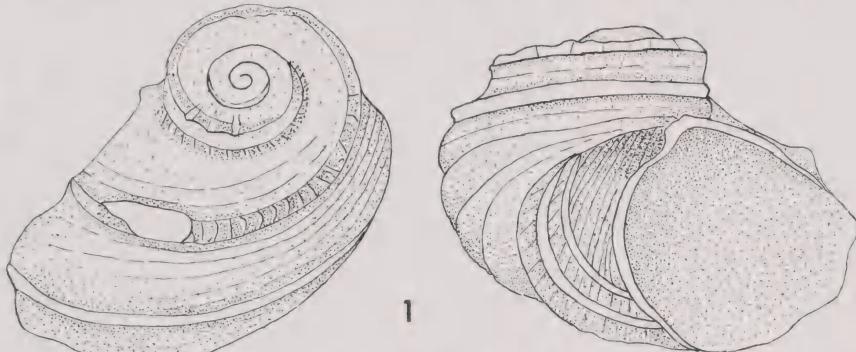


Fig. 1. *Schismope lyallensis* Finlay. Holotype TM-696: height 1.8mm.

Schismope laqueus Finlay, [1927]

(Fig. 2)

1927. *Schismope laqueus* Finlay, Trans. Proc. N.Z. Inst. 57: 340, pl. 19, figs. 30, 31; Powell, 1955, Cape Exped. Ser. Bull. 15: 46.

TYPE LOCALITY: Snares Island, in 50 fathoms (91.5 m).

Type material: AIM No. TM-695. Holotype: height 0.95 mm, width 1.25 mm (beach-worn).

Between the curved axial ribs on the ventral side of the shell are diagonal striae emanating from the umbilicus.

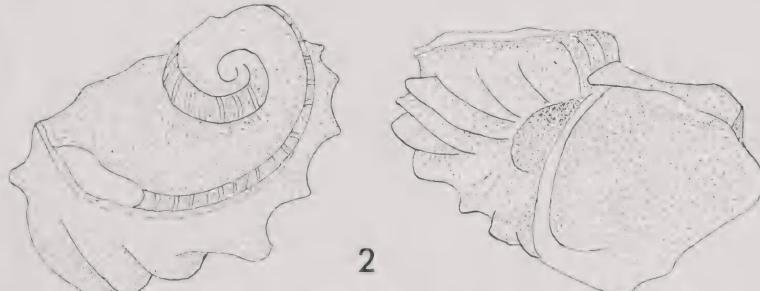


Fig. 2. *Schismope laqueus* Finlay. Holotype TM-695: height 0.95mm.

Schismope iota Finlay, [1927]

(Fig. 3)

1927. *Schismope iota* Finlay, Trans. Proc. N.Z. Inst. 57: 340; Powell, 1955, Cape Exped. Ser. Bull. 15: 46.

TYPE LOCALITY: Snares Island, in 50 fathoms (91.5 m).

Type material: AIM No.TM-693. Holotype: height 0.85 mm, width 0.82 mm

Seven paratypes (all beach-worn).

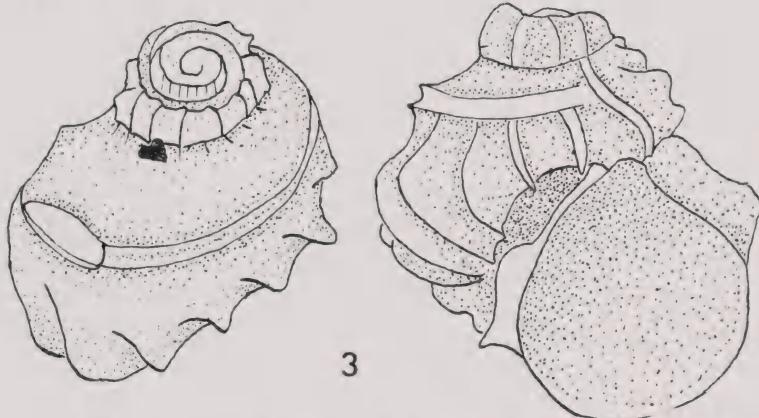


Fig. 3. *Schismope iota* Finlay. Holotype TM-693; height 0.85mm.

Family FISSURELLIDAE

Tugali Gray in Dieffenbach, 1843

Tugali pliocenica Finlay, 1926

1926. *Tugali pliocenica* Finlay, Trans. Proc. N.Z. Inst. 56: 227, pl. 59, figs. 1-5; Fleming, 1966, N.Z. Dep. Sci. Ind. Res. Bull. 173: 37.

TYPE LOCALITY: Castlecliff blue clays (Castlecliffian), [L.Pleistocene].

Type material: AIM No.TM-783. Holotype: length 18.0 mm, width 11.0 mm, height 6.2 mm. Two paratypes 22.5 mm and 17.0 mm in length.

The holotype has c. 55 radial ribs and the smallest paratype c. 61 ribs.

Tugali navicula Finlay, 1926

1926. *Tugali navicula* Finlay, Trans. Proc. N.Z. Inst. 56: 227, pl. 59, figs. 6-9; Powell & Bartrum, 1929, Trans. Proc. N.Z. Inst. 60: 412; Fleming, 1966, N.Z. Dep. Sci. Ind. Res. Bull. 173: 37.

TYPE LOCALITY: Target Gully "shell-bed" (Awamoan) [L. Miocene].

Type material: AIM No. TM-782. Holotype: length 17.5 mm, width 9.6 mm, height 4.5 mm. Two paratypes 25.2 mm and 17.7 mm in length.

The holotype is a young and greatly depressed specimen with c. 42 radial ribs. The largest senile paratype is far more elevated and has c. 53 ribs.

Tugali colvillensis Finlay, [1927]

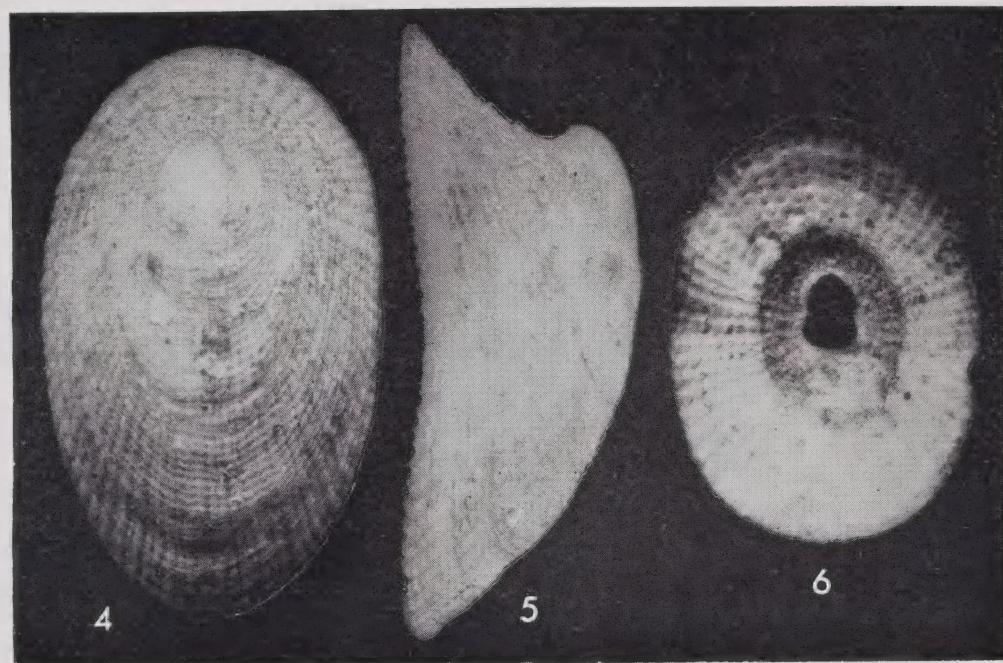
(Figs. 4, 5)

1926. *Tugali colvillensis* Iredale & Finlay MS., Trans. Proc. N.Z. Inst. 56: 227 (*nom. nud.*).
1927. *Tugali colvillensis* Finlay, Trans. Proc. N.Z. Inst. 57: 345.

TYPE LOCALITY: Hauraki Gulf, dredged in 20 - 25 fathoms (37 - 46 m), near Cape Colville.

Type material: AIM No.TM-781. Holotype: length 21.8 mm, width 13.0 mm, height 8.4 mm. One paratype, length 14.5 mm, width 8.4 mm, height 5.0 mm.

The holotype has c. 73 radial ribs and the paratype c. 55 ribs.



Figs. 4-6. 4, 5. *Tugali colvillensis* Finlay. Holotype TM-781: length 21.8mm. 4. Dorsal view. 5. Lateral view. 6. *Monodilepas otagoensis* Finlay. Paratype: length 8.2mm.

Montfortula Iredale, 1915

Montfortula chathamensis Finlay, 1928

1928. *Montfortula chathamensis* Finlay, Trans. Proc. N.Z. Inst. 59: 235, pl. 41, figs. 34, 35.
1971. *Montfortula rugosa* (Quoy & Gaimard), Dell, Rec. Dom. Mus. 750: 37.

TYPE LOCALITY: Chatham Islands.

Type material: AIM No.TM-487. Holotype: length 13.7 mm, width 10.5 mm, height 6.5 mm. Two paratypes 12.1 mm and 7.0 mm in length (very worn).

The holotype has 37 primary radial ribs, the largest paratype 42 and the smallest paratype 32 ribs. According to Dell (1971), *M. chathamensis* is a synonym of *M. rugosa* (Quoy & Gaimard).

Emarginula Lamarck, 1801

Emarginula striatula valentior Finlay, 1928

1928. *Emarginula striatula valentior* Finlay, Trans. Proc. N.Z. Inst. 59: 235, pl. 42, figs. 56, 57.
1955. *Emarginula striatula* (Quoy & Gaimard), Powell, Cape Exped. Ser. Bull. 15: 48.

TYPE LOCALITY: Chatham Islands.

Type material: AIM No.TM-261. Holotype: length 21.3 m, width 16.0 mm, height 11.5 mm.

The holotype has 69 radial riblets. The subspecies has been merged with *Emarginula striatula* (Quoy & Gaimard), by Powell (1955).

Monodilepas Finlay, [1927]

Monodilepas skinneri Finlay, 1928

1928. *Monodilepas skinneri* Finlay, Trans. Proc. N.Z. Inst. 59: 236, pl. 43, fig. 59.
1953. *Monodilepas monilifera skinneri* Finlay, Dell, Trans. R. Soc. N.Z. 81: 150, pl. 14, fig. 1, textfigs. B. 7-9 (figd. holotype).

TYPE LOCALITY: Chatham Islands.

Type material: AIM No.TM-486. Holotype: length 21.7 mm, width 14.0 mm, height 5.3 mm (Worn).

The holotype has c. 96 radial ribs. The species has been illustrated and reduced to a subspecies of *M.monilifera* (Hutton, 1873) by Dell (1953).

Monodilepas otagoensis Finlay, 1930

(Fig. 6)

1930. *Monodilepas otagoensis* Finlay, Trans. Proc. N.Z. Inst. 61: 222, pl. 42, fig. 6; Dell, 1953, Trans. R. Soc. N.Z. 81: 151, pl. 14, fig. 2, textfigs. B. 10-12.

TYPE LOCALITY: 10 miles E.N.E. of Otago Heads, in 50 fathoms (91.5 m.).

Type material: AIM No.TM-485. Holotype: length 10.0 mm, width 8.1 mm, height 2.2 mm. Three paratypes, length 8.2 mm, width 6.0 mm; length 7.2 mm, width 5.9 mm; length 4.5 mm, width 3.7 mm.

The type specimens are all young and unusually broad. The largest paratype is the least immature and consequently more slender than the holotype. The length: width ratio index is only 72% and the radial ribs number 56 as compared with 80 in the holotype. These features are within the range of variation of *M.monilifera* (Hutton), as given by Dell (1953), and *M.otagoensis* appears to be only a developmental form of that species.

Monodilepas diemenensis Finlay, 1930

1930. *Monodilepas diemenensis* Finlay, Trans. Proc. N.Z. Inst. 61: 222; Dell, 1953, Trans. R. Soc. N.Z. 81: 150, pl. 14, fig. 4, textfigs. B. 4-6.

TYPE LOCALITY: Cape Maria van Diemen.

Type material: AIM No.TM-484. Holotype: length 13.2 mm, width 9.6 mm, height 3.6 mm. (very worn).

The holotype has been illustrated by Dell (1953) but the cited dimensions, i.e. 9.0 mm x 7.0 mm are incorrect. Finlay's original dimensions are very close to the actual measurements of the holotype.

Scutus Montfort, 1810**Scutus petrafixus** Finlay, 1930

1930. *Scutus petrafixus* Finlay, Trans. Proc. N.Z. Inst. 61: 54, pl. 2, fig. 23; Fleming, 1966, N.Z. Dep. Sci. Ind. Res. Bull. 173: 37.

TYPE LOCALITY: Oamaru limestone, (Ototaran) [= ? Runangan, U. Eocene].

Type material: AIM No.TM-707. Holotype: length 50.0 mm, width 34.6 mm (incomplete).

The holotype is embedded in matrix and the posterior margin has been sectioned off. The apex is 17.0 mm from the anterior shell-margin.

Family **TROCHIDAE****Thoristella** Iredale, 1915**Thoristella chathamensis benthicola** Finlay, [1927]

(Fig. 7)

1925. *Thoristella (chathamensis) benthicola* Finlay, Ged. Verb. Verh. geol. Mijnb. Gen. Ned. & Kolon. 8: 170 (*nom. nud.*).

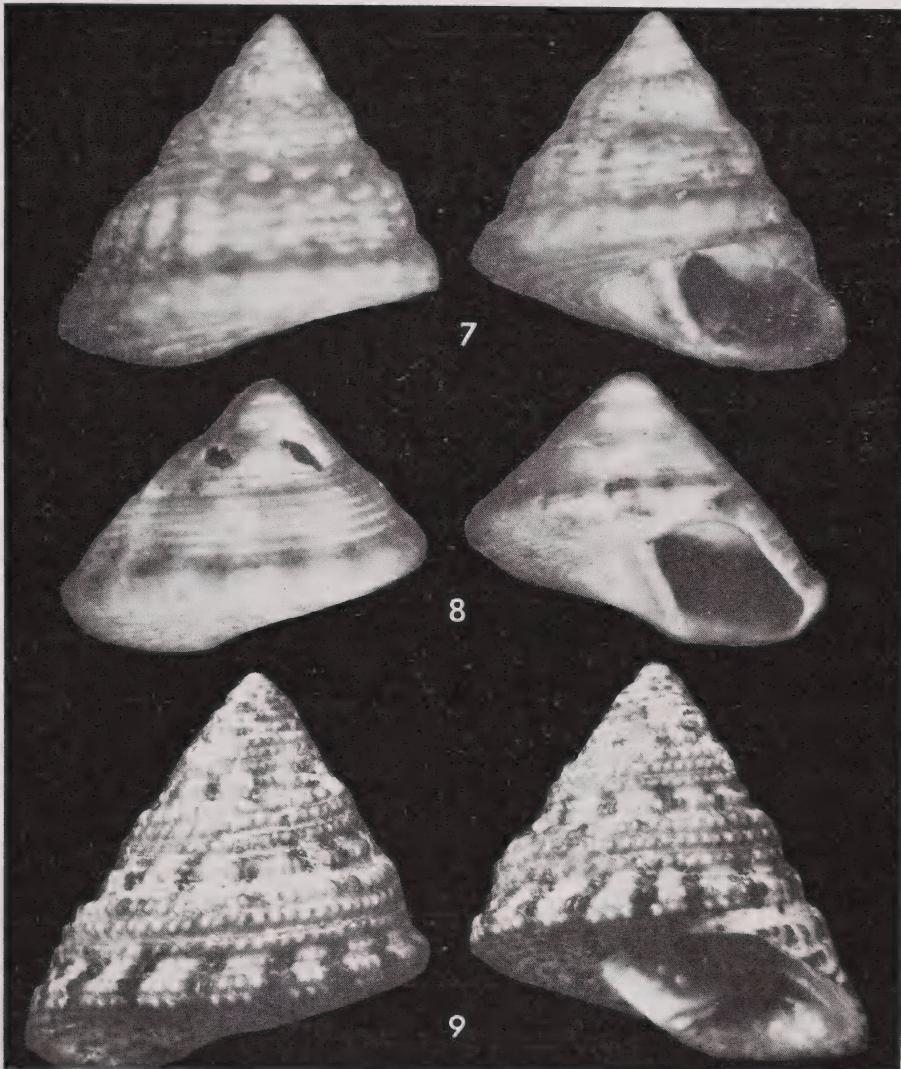
1925. *Thoristella (opressa) benthicola* Finlay, Ged. Verb. Vehr. Mijnb. Gen. Ned. & Kolon. 8: 170 (*nom. nud.*).

1927. *Thoristella (chathamensis) benthicola* Finlay, Trans. Proc. N.Z. Inst. 57: 350, pl. 18, figs. 7-10; Powell, 1937, Shellf. N.Z., p. 63.

TYPE LOCALITY: Dredged off Otago Heads, in 60 fathoms (110 m).

Type material: AIM No.TM-764.. Holotype: height 6.5 mm, width 7.1 mm. One paratype, height 6.2 mm, width 6.8 mm (immature specimen).

The types are beach-worn specimens. Between the spiral cords are minute, close-set and oblique axial riblets which become finer and slightly arcuate between the basal cords. The holotype has 15 axial ribs on the body whorl and 16 on the penultimate whorl, and the paratype 18 and 17 respectively.



Figs. 7-9. 7. *Thoristella chathamensis benthicola* Finlay. Holotype TM-764; height 6.5mm. 8. *T. chathamensis fossilis* Finlay. Holotype TM-766; height 3.9mm. 9. *Paraclanculus peccatus* Finlay. Holotype TM-584; height 11.0mm.

Thoristella chathamensis fossilis Finlay, [1927]

(Fig. 8)

- 1925. *Thoristella [chathamensis] fossilis* Finlay, Ged. Verb. Verh. geol. Mijnb. Gen. Ned. & Kolon. 8: 170 (*nom. nud.*).
- 1925. *Thoristella [fossilis] profossilis* Finlay, Ged. Verb. Verh. geol. Mijnb. Gen. Ned. & Kolon. 8: 170 (*nom. nud.*).
- 1927. *Thoristella [chathamensis] fossilis* Finlay, Trans. Proc. N.Z. Inst. 57: 350, pl. 18, figs. 11-14; Fleming, 1966, N.Z. Dep. Sci. Ind. Res. Bull. 175: 39.

TYPE LOCALITY: Target Gully Shell bed (Awamoan), [L. Miocene].

Type material: AIM No.TM766. Holotype: height 3.9 mm, width 5.4 mm (4 small holes on dorsal side). Ten paratypes, several fragmented and juvenile.

Finlay (1927a) designated the small specimen figured by him on plate 18, fig. 13, as the holotype, but the given measurements, i.e. height 5.5 mm, width 7.0 mm, are those of a large paratype with a part of the spire whorls missing, and illustrated on plate 18, figs. 11 and 14.

The holotype has moderately smooth spiral cords, but in one broken paratype the spiral cords are divided into small, regular nodules.

Paraclanculus Finlay, [1927]

Paraclanculus peccatus Finlay, [1927]

(Fig. 9)

- 1897. *Trochus (Clanculus) ringens* (Menke), Suter, Proc. Malac. Soc. Lond. 2: 262; Suter, 1913, Man. N.Z. Moll. p. 112, pl. 38, fig. 3 (*non Monodonta ringens* Menke, 1843).
- 1927. *Paraclanculus peccatus* Finlay, Trans. Proc. N.Z. Inst. 57: 351, pl. 18, fig. 17; Powell, 1937, Shelff. N.Z. p. 63.

TYPE LOCALITY: Tryphena, Great Barrier Island [ex-La Roche].

Type material: AIM No.TM-584. Holotype: height 11.0 mm, width 11.1 mm.

P.peccatus Finlay is the type species of *Paraclanculus* Finlay, 1927, by monotypy.

Zediloma Finlay, [1927]

Zediloma digna Finlay, [1927]

(Figs. 10,11)

- 1781. "*Cochlea lunaris pernigra*" Chemnitz, Syst. Conch. Cab. 5: 228, pl. 185, fig. 1848 (Hab: South Seas) [*non binom.*].
- 1791. *Turbo nigerrimus* Gmelin, Syst. Nat. ed. 13: 3597 (ref. Chemnitz, *op. cit.*, fig. 1848) [Oceano australi].
- 1817. *Turbo nigerrimus* Gmelin, Dillwyn, Descr. cat. Rec. shells 2: 816 (South Sea on the coasts of New Zealand).
- 1913. *Monodonta nigerrima* Gmelin, Suter, Man. N.Z. Moll. p. 114, pl. 38, figs. 5, 5a.
- 1927. *Zediloma digna* Finlay, Trans. Proc. N.Z. Inst. 57: 353, pl. 18, figs. 24, 25; Clark, 1958, Trans. R. Soc. N.Z. 85: 666, textfig.

TYPE LOCALITY: St. Clair near Dunedin.

Type material: AIM No.TM-870. Holotype: height 21.0 mm, width 22.4 mm. One paratype, height 20.0 mm, width 23.0 mm (depressed spire).

When Finlay (1927a) proposed *Zediloma digna* for the New Zealand species listed by Suter as *nigerrima*, he was under the impression, following Philippi (1845), that *Turbo nigerrimus* Gmelin, was originally described from South America. Chemnitz (1781) described the species from the South Seas and remarked that the specimen illustrated by him originated from Solander (who

accompanied Captain Cook on his voyage to the South Pacific and New Zealand). Philippi (*loc.cit*) proposed the genus *Diloma* for 4 species, i.e. *Trochus melanoloma* Menke (= *Monodonta melanoloma* Menke, 1843), *Turbo aethiops* Gmelin, 1791, *Turbo nigerrimus* Gmelin, 1791 and *Trochus zelandicus* Quoy & Gaimard, 1834, but did not select a type species. He also considered *Trochus araucanus* d'Orbigny, 1840, described from Valparaiso, Chile, to be a new name for *Turbo nigerrimus* Gmelin. Comparison of New Zealand and South American specimens of *Turbo nigerrimus* and *Trochus araucanus* shows the two species to be inseparable.

The type designation for *Diloma* Philippi requires clarification: Herrmannsen's (1847) and Gray's (1847) designations of *Trochus nigerrimus* Gmelin, 1791, as the type of *Diloma* cannot be considered valid, since *Trochus nigerrimus* Gmelin, described from China, is a different species from *Turbo nigerrimus* of Gmelin and Philippi, and belongs to *Tegula* Lesson, 1835, subgenus *Omphalius* Philippi, 1847. The next available, and probably valid type designation is the one by Pilsbry in Tryon (1889) who designated "*M.[onodonta] nigerrima* (Gmel) Phil." as the type species of *Diloma*. If this type designation is not acceptable on the grounds of ambiguity, then Suter's (1913) type designation of *Turbo nigerrimus* Gmelin, is the next explicit type designation.

Zediloma Finlay, 1927, type species by original designation *Z.digna* Finlay, 1927 = *Turbo nigerrimus* Gmelin, 1791, becomes a synonym of *Diloma* Philippi, 1847.

Zediloma arida Finlay, [1927] (Fig. 12)

- 1913. *Monodonta coracina* Troschel, Suter, Man. N.Z. Moll. p. 114, pl. 38, fig. 4 (non *Trochus coracinus* Philippi, 1851).
- 1927. *Zediloma arida* Finlay, Trans. Proc. N.Z. Inst. 57: 353 (*nom. subst. pro Monodonta coracina* Suter, 1913); Clark, 1958, Trans. R. Soc. N.Z. 85: 668, textfigs.

TYPE LOCALITY: Lyttelton Harbour.

Type material: AIM No.TM-869. Finlay's selected "neotype": height 13.0 mm, width 15.4 mm (operculum within). Another, larger specimen in the same vial, has no type status.

Finlay (1927a) proposed *Zediloma arida* as a substitute name for *Monodonta coracina* Suter, and at the same time applied the name to the particular specimen figured by Suter (1915, pl. 38, fig. 4). According to art.72(d) of the Code of ICZN, the actual type of *Zediloma arida* is the specimen figured by Suter (*loc.cit.*), provided it is still extant. Even if lost, Finlay's neotype designation does not fulfil the qualifying conditions for a neotype selection (art.75(c) and 75(e)).

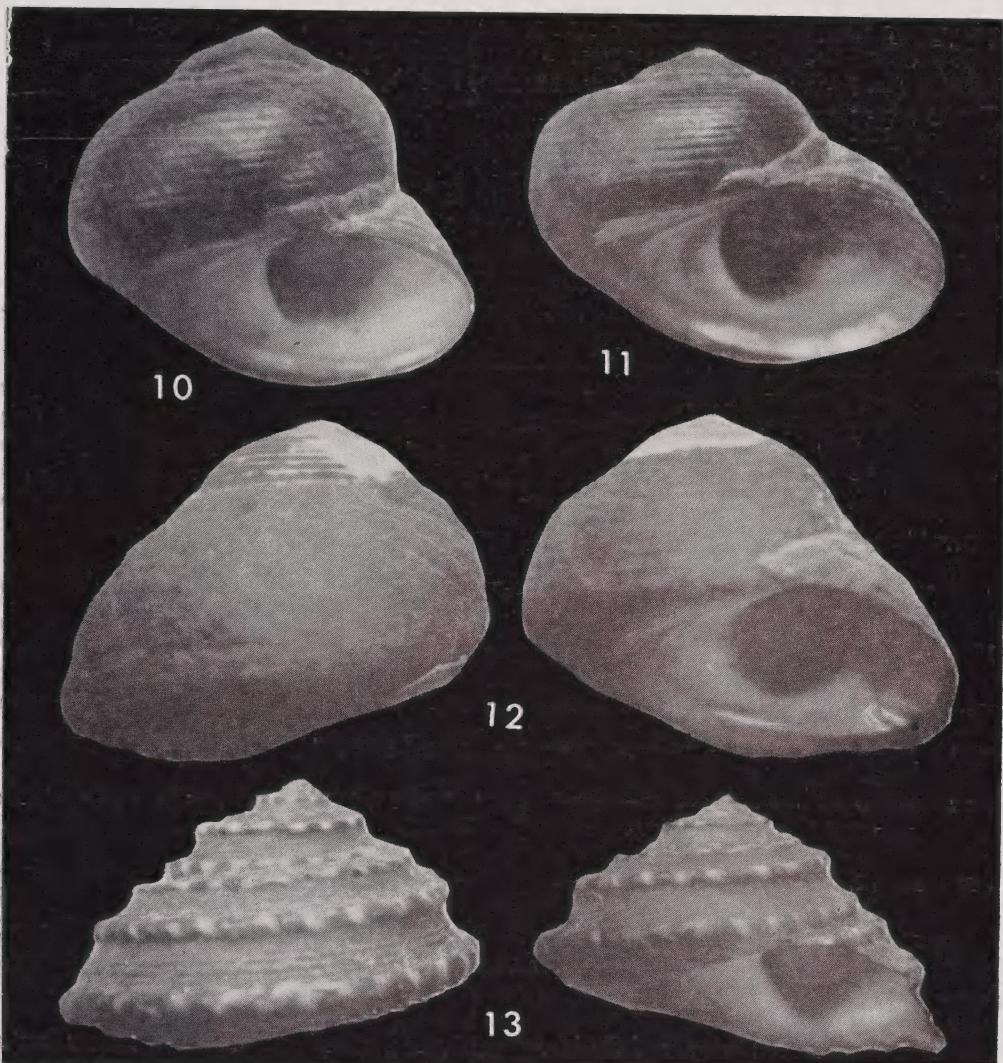
Anisodiloma Finlay, [1927]

Anisodiloma lugubris lenior Finlay, [1927] (Fig. 13)

- 1927. *Anisodiloma lugubris lenior* Finlay, Trans. Proc. N.Z. Inst. 57: 354; Powell, 1937, Shellf. N.Z. p. 63.

TYPE LOCALITY: Taieri beach, 5 miles south of Taieri River.

Type material: AIM No.TM-34. Holotype: height 10.2 mm, width 14.8 mm.



Figs. 10-13. 10, 11. *Zediloma digna* Finlay. Types TM-870. 10. Holotype: height 21.0mm. 11. Paratype: height 20.0mm. 12. *Z. arida* Finlay. "Neotype" TM-869: height 13.0mm. 13. *Anisodiloma lugubris lenior* Finlay. Holotype TM-34: height 10.2mm.

Whorls have 3 nodulose spiral cords and interspaces of cords 4 intermediate spiral threads and oblique axial striae. The subspecies is the southern form of *A.lugubris* (Gmelin, 1971).

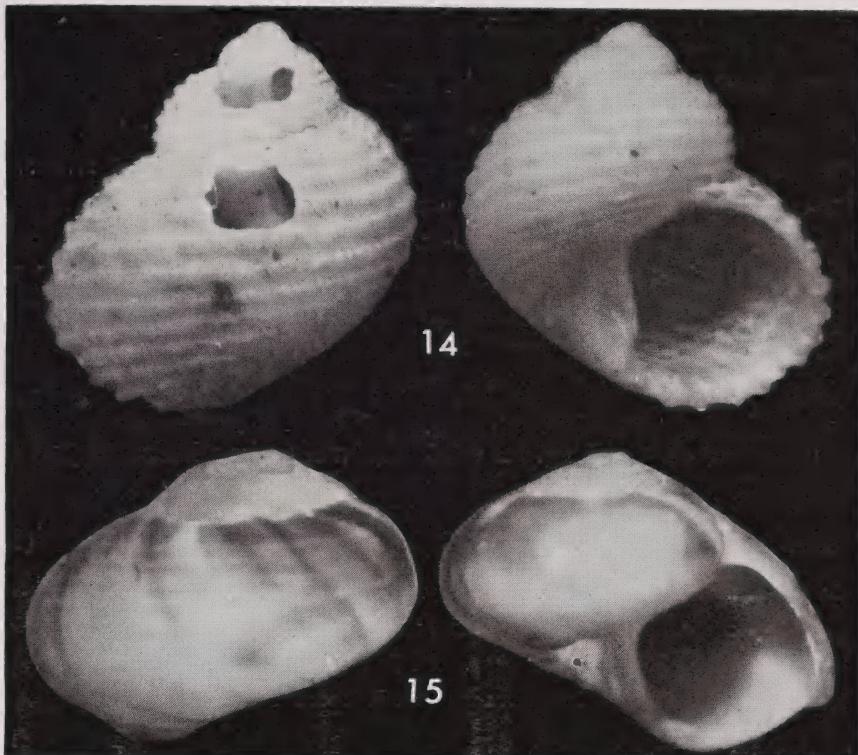
Herpetopoma Pilsbry in Tryon, 1889

Herpetopoma mariae Finlay, 1930

(Fig. 14)

1913. *Euchelus baccatus* Menke, Suter, Man. N.Z. Moll. p. 1084 (non *Monodonta baccata* Defrance in Blainville, 1824; nec Menke, 1843).

1930. *Herpetopoma mariae* Finlay, Trans. Proc. N.Z. Inst. 61: 223.



Figs. 14, 15. 14. *Herpetopoma mariae* Finlay. Holotype TM-357: height 10.5mm.
15. *Talopena sublaevis* Finlay. Holotype TM-756: height 2.8mm.

TYPE LOCALITY: Cape Maria van Diemen.

Type material: AIM No.TM-357. Holotype: height 10.5 mm, width 10.0 mm (2 holes on dorsal side at last 2 whorls). One paratype, height 9.3 mm (juvenile, outer lip broken, holed on ventral side of the body whorl).

Talopena Iredale, 1918

Talopena sublaevis Finlay, [1924]

(Fig. 15)

- 1853. *Margarites tessellata* A. Adams, Proc. Zool. Soc. Lond. for 1851: 191.
- 1924. *Talopena sublaevis* Finlay, Trans. Proc. N.Z. Inst. 55: 520, textfig. 3.
- 1924. *Cantharidella tessellata* (sic) (A. Adams), Powell, Shellf. N.Z. p. 87.

TYPE LOCALITY: In oyster-scrapings from Bluff [Stewart I.].

Type material: AIM No.TM-756. Holotype: height 2.8 mm, width 3.8 mm.

On the card Finlay wrote in 1930: "a worn juvenile of *Cantharidella tesellata* (= *tessellata*)."

Calliostoma Swainson, 1840**Calliostoma suteri** Finlay, 1923

1923. *Calliostoma suteri* Finlay, Trans. Proc. N.Z. Inst. 54: 101, pl. 10, figs. 1a-c.
 1926. *Calliostoma (Calliotropis) suteri* Finlay, Oliver, Proc. Malac. Soc. Lond. 17: 113.
 1927. *Venustas (Mucrinops) suteri* Finlay, Trans. Proc. N.Z. Inst. 57: 361.
 1935. *Maurea (Mucrinops) suteri* (Finlay), Laws, Trans. Proc. R. Soc. N.Z. 65: 32.
 1966. *Maurea (Mauriella) suteri* (Finlay), Fleming, N.Z. Dep. Sci. Ind. Res. Bull. 173: 38.

TYPE LOCALITY: Ardgowan [L. Miocene].

Type material: AIM No.TM-129. Holotype: height 6.8 mm, width 8.2 mm (spire whorls missing). Paratype illustrated on pl. 10, fig. 1b: fragment of body whorl; paratype illustrated on pl. 10, fig. 1c: width 11.0 mm (spire whorls and part of body whorl missing).

Calliostoma suteri fragile Finlay, 1923

(Fig. 16)

1923. *Calliostoma suteri* var. *fragile* Finlay, Trans. Proc. N.Z. Inst. 54: 102, pl. 10, figs. 2a-c.
 1926. *Calliostoma (Calliotropis) fragile* Finlay, Oliver, Proc. Malac. Soc. Lond. 17: 113.
 1927. *Venustas fragilis* Finlay, Trans. Proc. N.Z. Inst. 57: 361.
 1935. *Maurea fragilis* (Finlay), Laws, Trans. Proc. R. Soc. N.Z. 65: 32.

TYPE LOCALITY: Ardgowan [L. Miocene].

Type material: AIM No.TM-130. Holotype: height 10.0 mm, width 10.7 mm. Paratype illustrated on pl. 10, fig. 2b: height 10.6 mm, width 10.8 mm, (part of body whorl missing on ventral side); paratype illustrated on pl. 10, fig. 2c; height 8.7 mm+, width 11.2 mm (spire whorls missing).

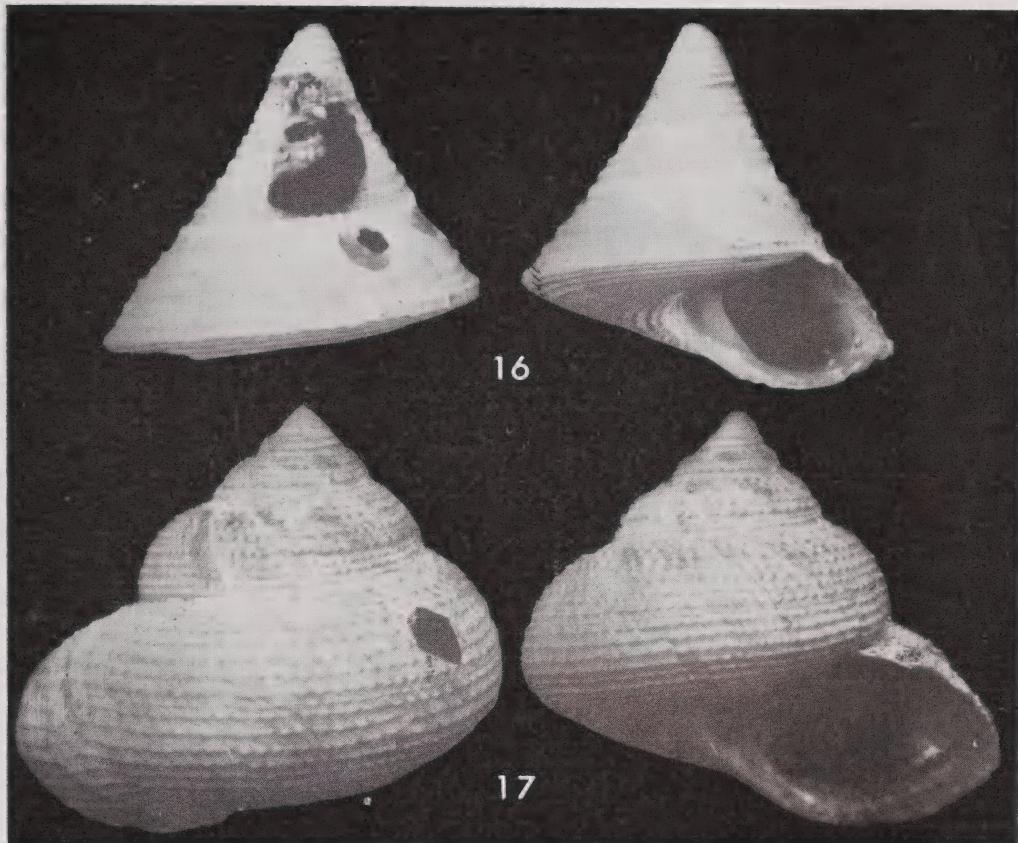
The specimen illustrated on pl. 10, fig. 2a and designated by Finlay (1923a) in the plate explanations as the holotype, is present in the collection, but the width is only 10.7 mm and not 15.0 mm as given by Finlay (*loc.cit.*) in the text.

Calliostoma temporemutata Finlay, 1924

1923. *Calliostoma cancellatum* Finlay, Trans. Proc. N.Z. Inst. 54: 102, pl. 10, fig. 3 (non Schepman, 1908).
 1924. *Calliostoma temporemuta* Finlay, Trans. Proc. N.Z. Inst. 55: 509, footnote (*nom. subst. pro C. cancellatum* Finlay, 1923).
 1926. *Calliostoma (Calliotropis) temporemuta* Finlay, Oliver, Proc. Malac. Soc. Lond. 17: 114.
 1927. *Fautor temporemutata* (Finlay), Trans. Proc. N.Z. Inst. 57: 492 (emend.).
 1935. *Fautor temporemutatus* (Finlay), Laws, Trans. Proc. R. Soc. N.Z. 65: 31, pl. 5, fig. 4; Fleming, 1966, N.Z. Dep. Sci. Ind. Res. Bull. 173: 39.

TYPE LOCALITY: Ardgowan [L. Miocene].

Type material: AIM No.TM-128. Holotype: height 5.4 m +, width 6.0 mm (juvenile, spire whorls and part of penultimate whorl missing).



Figs. 16, 17. 16. *Calliostoma suteri fragile* Finlay. Holotype TM-130; height 10.0mm.
17. *Venustas punctulata urbanior* Finlay. Holotype TM-824; height 26.8mm.

Venustas Finlay, [1927] [= **Maurea** Oliver, 1926]

Venustas punctulata urbanior Finlay, [1927]

(Fig. 17)

- 1926. *Calliostoma (Mauriella) punctulatum* subsp. *stewartianum* Oliver, Proc. Malac. Soc. Lond. 17: 109, pl. 10, fig. 1 (Foveaux Str., Stewart I.) [30 December, 1926].
- 1927. *Venustas punctulata urbanior* Finlay, Trans. Proc. N.Z. Inst. 57: 361, pl. 18, fig. 27.
- 1950. *Venustas punctulata urbanior* Finlay, Dell, Dom. Mus. Rec. Zool. 1: 47; Powell, 1955, Cape Exp. Ser. Bull. 15: 55.
- 1957. *Maurea punctulata stewartiana* (Oliver), Powell, Shells N.Z. p. 88.
- 1966. *Maurea (Mauriella) punctulata stewartiana* (Oliver), Fleming, N.Z. Dep. Sci. Ind. Res. Bull. 173: 38.

TYPE LOCALITY: Foveaux Strait, in 20 fathoms (37 m).

Type material: AIM No.TM-824. Holotype: height 26.8 mm, width 29.3 mm (operculum within). One paratype, height 22.4 mm, width 25.7 mm.

Venustas cunninghami regifica Finlay, 1927

1795. "Trochus selectus" Chemnitz, Syst. Conch. Cab. 11: 168, pl. 196, figs. 1896, 1897 (Coasts of New Zealand) [non binom.].
1817. *Trochus selectus* Dillwyn, Desc. cat. Rec. shells 2: 801 (ref. Chemnitz, *op. cit.*); Wood, 1825, Ind. Test, p. 140, pl. 29, fig. 101a.
1834. *Trochus cunninghami* Gray in Griffiths & Pidgeon, Anim. Kingd. Bar. Cuv. Moll. Rad. 12: 600, pl. 1, fig. 7.
1846. *Trochus torquatus* Anton in Philippi, Syst. Conch. Cab. ed. 2, 2 (3): 261, pl. 38, fig. 13; Philippi, 1849, Zeit. Malakozool. 5: 126 (non H. C. Lea, 1846).
1913. *Calliostoma selectum* Chemnitz, Suter, Man. N.Z. Moll. p. 146, pl. 40, fig. 4; Finlay, 1924, Trans. Proc. N.Z. Inst. 55: 518.
1926. *Calliostoma (Calliotropis) pagoda* Oliver, Proc. Malac. Soc. Lond. 17: 112, pl. 10, fig. 4.
1927. *Venustas cunninghami regifica* Finlay, Trans. Proc. N.Z. Inst. 57: 485, pl. 24, figs. 9, 10.
1950. *Venustas cunninghami cunninghami* (Griffiths & Pidgeon), Dell, Dom. Mus. Rec. Zool. 1: 53.
1950. *Venustas cunninghami pagoda* (Oliver), Dell, Dom. Mus. Rec. Zool. 1: 53.
1966. *Maurea (Calotropis) cunninghami* (Griffiths & Pidgeon), Fleming, N.Z. Dep. Sci. Ind. Res. Bull. 173: 38.

TYPE LOCALITY: Off Otago Heads, in 30 fathoms (55 m).

Type material: AIM No.TM-823. Holotype: height 56.8 mm, width 64.1 mm.

Oliver (1926) and Finlay (1927a), rejected the name *selectus* Chemnitz on the grounds of not being a binomial, but the specific name was twice validated prior to the introduction of *Trochus cunninghami* into literature. In introducing *regifica* for the form with roundly angled sides, Finlay (1927b) was anticipated by Oliver (*loc.cit.*) with the description of *Calliostoma pagoda*. Dell (1950) has shown that both forms are sympatric at Kapiti Islands, and *Venustas cunninghami regifica* Finlay, is considered to be a synonym of the chronologically prior *Maurea selecta* (Dillwyn, 1817).

Family TURBINIDAE

Argalista Iredale, 1915

Argalista nana Finlay, 1930

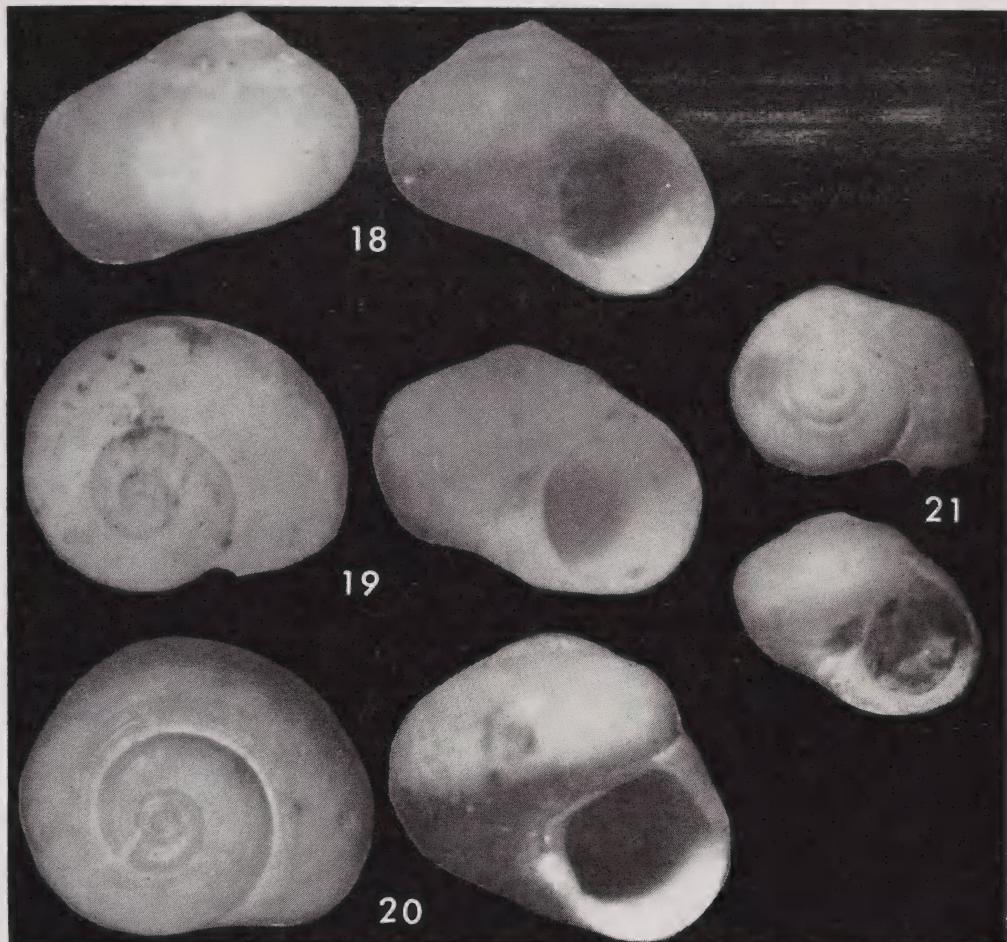
(Fig. 18)

1930. *Argalista nana* Finlay, Trans. Proc. N.Z. Inst. 61: 223; Powell, 1957, Shells N.Z. p. 90.

TYPE LOCALITY: Awanui Bay, in 12 fathoms (22 m).

Type material: AIM No.TM-44. Holotype: height 1.7 mm, width 2.4 mm. Thirteen paratypes (beach-worn specimens).

Finlay's measurements given for the holotype, i.e. height 9.0 mm, width 2.5 mm, are erroneous. The type is slightly wider than high and Finlay's measurements are out of proportion to the ratio of height : width. The penultimate whorl of the holotype has c. 8 spiral threads, and the body whorl c.40; the umbilicus is not almost filled up as stated by Finlay, but has a deep, crescent-shaped fissure within.



Figs. 18-21. 18. *Argalista nana* Finlay. Holotype TM-44; height 1.7mm. 19. *A. proumbilicata* Finlay. Holotype TM-47; height 1.7mm. 20. *A. imperia* Finlay. Holotype TM-40; height 2.2mm. 21. *A. kaiparaensis* Finlay. Holotype TM-41; height 1.0mm.

Finlay's species is a synonym of *Homalopoma (Argalista) fluctuata* (Hutton, 1883).

Argalista proumbilicata Finlay, 1930

(Fig. 19)

1930. *Argalista proumbilicata* Finlay, Trans. Proc. N.Z. Inst. 61: 56, pl. 2, figs. 20-22.
 1966. *Homalopoma (Argalista) proumbilicata* (Finlay), Fleming, N.Z. Dep. Sci. Ind. Res. Bull. 173: 40.

TYPE LOCALITY: Target Gully shell-bed (Awamoan) [L. Miocene].

Type material: AIM No.TM-47. Holotype: height 1.7 mm, width 2.4 mm. Paratype illustrated on pl. 2, fig. 22, width 1.9 mm, plus 17 other paratypes.

Argalista kaiparaensis Finlay, 1930

(Fig. 21)

1930. *Argalista kaiparaensis* Finlay, Trans. Proc. N.Z. Inst. 61: 56.
 1966. *Homalopoma (Argalista) kaiparaensis* (Finlay), Fleming, N.Z. Dep. Sci. Ind. Res. Bull. 174: 40.

TYPE LOCALITY: Pakaurangi Point, Kaipara (Hutchinsonian) [= Otaian, L. Miocene].

Type material: AIM No.TM-41. Holotype: height 1.0 mm, width 1.5 mm (hole on dorsal side of body whorl).

Argalista impervia Finlay, 1930

(Fig. 20)

1930. *Argalista impervia* Finlay, Trans. Proc. N.Z. Inst. 61: 57.
 1966. *Homalopoma (Argalista) impervia* (Finlay), Fleming, N.Z. Dep. Sci. Ind. Res. Bull. 173: 40.

TYPE LOCALITY: Target Gully shell-bed (Awamoan) [L. Miocene].

Type material: AIM No.TM-40. Holotype: height 2.2 mm, width 2.9 mm. Seventy-five paratypes.

BIBLIOGRAPHY OF H. J. FINLAY

- 1923a Some remarks on New Zealand Calliostomidae, with descriptions of New Tertiary species. *Trans. Proc. N.Z. Inst.* 54: 99-105, pl. 10.
 1923b List of recorded relationships between Australian and New Zealand Mollusca. *Rept. Aust. Ass. Adv. Sci.* 16: 332-343.
 1924a New shells from New Zealand Tertiary beds. *Trans. Proc. N.Z. Inst.* 55: 450-479, pl. 48-51.
 1924b New Zealand Tertiary Rissoids. *Trans. Proc. N.Z. Inst.* 55: 480-494, 13 textfigs.
 1924c The molluscan fauna of Target Gully. Part 1. *Trans. Proc. N.Z. Inst.* 55: 495-516.
 1924d Additions to the Recent molluscan fauna of New Zealand. *Trans. Proc. N.Z. Inst.* 55: 517-526, pl. 52, 7 textfigs.
 1924e The family Liottiidae, Iredale, in the New Zealand Tertiary. Part 1, the genus *Brookula*. *Trans. Proc. N.Z. Inst.* 55: 526-531, pl. 53.
 1924f Some necessary changes in names of New Zealand Mollusca. *Proc. Malac. Soc. Lond.* 16 (2): 99-107.
 1925 Some modern conceptions applied to the study of Cainozoic mollusca of New Zealand. *Ged. Verb. Vehr. geol.-Mijnb. Genoot. Nederl. & Kolonien*, geol. ser. 8: 161-172.
 1926a New shells from New Zealand Tertiary beds: Part 2. *Trans. Proc. N.Z. Inst.* 56: 227-258, pl. 55-60.
 1926b On *Iredalina*, new genus: a volute without plaits. *Proc. Malac. Soc. Lond.* 17 (1): 59-62, textfig.
 [1927a] A further commentary on New Zealand molluscan systematics. *Trans. Proc. N.Z. Inst.* 57: 320-485, pl. 18-23.
 1927b Additions to the Recent molluscan fauna of New Zealand — No. 2. *Trans. Proc. N.Z. Inst.* 57: 485-487, pl. 24-25.
 1927c New specific names for Austral Mollusca. *Trans. Proc. N.Z. Inst.* 57: 488-533.

- 1928 The Recent Mollusca of the Chatham Islands. *Trans. Proc. N.Z. Inst.* 59: 232-286, pl. 38-43.
- 1930a Invalid molluscan names. No. 1. *Trans. Proc. N.Z. Inst.* 61: 37-48.
- 1930b New shells from New Zealand Tertiary beds. Part 3. *Trans. Proc. N.Z. Inst.* 61: 49-84, pl. 1-6.
- 1930c Additions to the Recent molluscan fauna of New Zealand. No. 3. *Trans. Proc. N.Z. Inst.* 61: 221-247, pl. 42-45.
- 1930d Notes on Recent papers dealing with the Mollusca of New Zealand. *Trans. Proc. N.Z. Inst.* 61: 248-258, pl. 46.
- 1930e Revision of the New Zealand shells referred to *Fusinus*. *Trans. Proc. N.Z. Inst.* 61: 259-270, pl. 47-49.
- 1931a On *Austrosassia*, *Astroharpa* and *Australithes*, new genera; with some remarks on the gastropod protoconch. *Trans. Proc. N.Z. Inst.* 62: 7-19.
- 1931b On the occurrence of *Strebloceras* in New Zealand. *Trans. Proc. N.Z. Inst.* 62: 20-22, textfig.
- FINLAY, H. J. and F. H. McDOWALL**
1923 Fossiliferous limestone at Dowling Bay. *Trans. Proc. N.Z. Inst.* 54: 106-114, pl. 11, 2 textfigs.
- FINLAY, H. J. and C. R. LAWS**
1931 A second species of *Planorbis* from N.Z. *Trans. Proc. N.Z. Inst.* 62: 23-25, 6 textfigs.
- FINLAY, H. J. and J. MARWICK**
1937 The Wangaloan and associated molluscan faunas of Kaitangata-Green Island subdivision. *N.Z. Geol. Surv. Pal. Bull.* 15: 1-140, pl. 1-18.

REFERENCES

- CHEMNITZ, J. H.**
1781 *Neues systematisches Conchylien-Cabinet*. Nürnberg 5: 1-324, pl. 160-193.
- DELL, R. K.**
1950 The molluscan genus *Venustas* in New Zealand waters. *Dom. Mus. Rec. Zool.* 1 (5): 39-54, 27 textfigs.
1953 The molluscan genus *Monodilepas* in New Zealand. *Trans. R. Soc. N.Z.* 81 (1): 145-151, pl. 14, textfigs.
1971 The rediscovery of *Montfortula* (Mollusca: Fissurellidae) in New Zealand. *Rec. Dom. Mus.* 7 (5): 37-41, 6 figs.
- GRAY, J. E.**
1847 A list of the genera of Recent Mollusca, their synonyma and types. *Proc. Zool. Soc. Lond.* pp. 129-219.
- HERRMANNSEN, A. N.**
1847 *Indicis generum malacozoorum primordia*. Cassel, 1: 1-637.
- OLIVER, W. R. B.**
1926 New Zealand species of *Calliostoma*. *Proc. Malac. Soc. Lond.* 17: 107-115, pl. 10.
- PHILIPPI, R. A.**
1842-1845 *Abbildung und Beschreibungen neuer oder wenig gekannter Conchylien*. Cassel 1: 1-204.
- PILSBRY, H. A. in G. W. Tryon**
1889 *Manual of Conchology; structural and systematic*. Philadelphia 11: 1-519, pl. 1-67.
- POWELL, A. W. B.**
1955 Mollusca of the southern islands of New Zealand. Cape Exped. Ser. Bull. 15: 1-151, pl. 1-5.
- SUTER, H.**
1913-1915 *Manual of New Zealand Mollusca; with an Atlas of quarto plates*. Wellington. pp. i xxiii; 1-1120 (text - 1913); pls. 1-72 (Atlas - 1915).